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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,114	03/02/2004	Robert A. Pyles	Mo-6825D / MD-01-039D	2664
157	7590	12/21/2004	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			EINSMANN, MARGARET V	
			ART UNIT	PAPER NUMBER
			1751	
DATE MAILED: 12/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,114

Applicant(s)

PYLES ET AL.

Examiner

Margaret Einsmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 10,22,23,25,27,28 and 34-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 10,22,23,25,27 and 28 is/are rejected.
- 7) ☐ Claim(s) 34-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

This action is in response to the amendment of 10/18/04. The pending claims are 10, 22,23,25,27,28,34-36.

In a conversation with applicant's attorney on December 4th, 2004 the examiner indicated that the claims were in condition for allowance except for two formal matters in claim 34. Upon further consideration, the examiner finds that the application is not yet in condition for allowance. Accordingly the examiner's amendment has not been made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejection of claims 10, 22, 23 under 35 U.S.C. 102(b) as being anticipated by Fukuda et al., US 5,182,169 has been overcome by applicant's amendment incorporating the limitation of claim 24 into claim 10.

The rejection of claims 10, 22,23, 25 under 35 U.S.C. 102(b) as being anticipated by Hoshiyama, US 5,560,751 has been overcome by applicant's arguments and amendments.

The rejection of claims 10,22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Schafer et al., GB 1,559,627 has been overcome by applicant's amendment.

The following is a new grounds of rejection necessitated by applicant's amendments.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Batzar et al., US 5,667,891. Table 3 contains ink formulations comprising water, butyl carbitol, lauryl sulfate (an anionic emulsifier), an interference color flake (applicant's claimed metal flake) and an acrylate copolymer. See col 10 lines 9-16, 50-62. Column 11 lines 27 et seq. discloses that a dye can be added to all of the compositions in the tables. Accordingly all of the limitations of claim 10 are met.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10,22,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al., US 5,182,169. The paragraph bridging col 9 and 10 discloses a composition coated on a polyester or polyurethane resin comprising phthalocyanine blue (which is a disperse dye), butyl carbitol, titanium dioxide and a surfactant. Fukuda

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is silent as to the type of surfactant he includes in his coating composition but states that the surfactant is used as a wetting agent. Col 9 lines 66-67. It would have been obvious to the skilled artisan to use one of the surfactants claimed in claim 10 in the coating composition of Fukuda because surfactants are used for the purpose of emulsifying and reducing surface tension, and applicant claims any ionic surfactant as well as specific nonionic surfactants, all of which are functional equivalents useful as wetting agents.

The rejection of claim 34 under 35 U.S.C. 103(a) as being unpatentable over Dudley, US 4,089,765 has been mooted by applicant's arguments and amendments.

Claim 10,22,23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al., US 6,051,645. An ink comprising styrene, acrylate copolymers water, pigment and butyl carbitol is disclosed in example 6 column 13 lines 20-66. The pigment is copper phthalocyanine and there is no dye in the ink. However, column 7 lines 61-63 states that any organic or inorganic pigment could be used. Titanium dioxide as claimed in claim 10 is one of the most widely used inorganic pigments. Column 8 lines 46-56 discloses that gold and silver pigments may be used reading on applicant's claimed metal flakes, and plastic pigments may be used reading on applicant's claimed crosslinked polymethacrylate microspheres. Column 9 lines 1-10 discloses that dyes having low water solubility may be included. This statement reads on the dispersed dye claimed in claim 22. Regarding the limitation of claim 23, it is

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notoriously well known that azo, diphenylamine and anthraquinone compounds encompass the vast majority of disperse dyes. It would have been obvious to the skilled artisan to replace the phthalocyanine colorant in example 6 with a disperse dye as claimed and also to use one of the pigments as claimed in claim 10 (e) because patentee suggests that these components may be included in his ink compositions. Accordingly the substitution of these elements in example 6 would be expected to produce an equivalent ink composition.

Claims 10, 22,23,25,27 and 28 are rejected under 35 U.S.C. 103(a)) as being obvious over Hoshiyama, US 5,560,751 in view of Betz et al, US 5,432,568.

Hoshiyama discloses the formation of a dye coating comprising butyl cellosolve, a surfactant , FC-431, (which is an anionic surfactant since it comprises an ethoxylated acid group) and a disperse dye, C.I. Disperse blue which is an anthraquinone dye compound (col 6 lines 63-67). He then coats those components onto an aromatic polycarbonate lens substrate (CR-39), which is the polymerizate as claimed in claim 28. See col 7 lines 34-40. When the coating is dried, a dyed molded article is obtained. While butyl cellosolve is not within the scope of applicant's carrier, Hoshiyama states at column 4 lines that diethylene glycol monobutyl ether, which is applicant's claimed carrier, may also be used as the dye leveling agent equivalent to butyl-b-oxyethyl ether (butyl cellosolve). See col 4 lines 15-22. Hoshiyama does not disclose applicant's component (d).

Betz et al. teach eyeglasses formed from polycarbonate or acrylic (col 4 line 35) which lenses are coated on the surface with an opacifying pigment which is embodied as titanium dioxide (col 8 lines 38-43). Additionally the lenses may also be coated with an acrylic or styrene copolymer coating. Such coatings may utilize aluminum (applicant's claimed metal flake). Binders for the coating compositions are preferably acrylic resins, polyester resins and polyurethanes. See col 8 lines 38-64. Patentee states at col 10 lines 64-68, that further improvement may be achieved by tinting the transparent optical regions.

It would have been obvious to the skilled artisan to tint the eyeglasses of Betz et al. with the dyeing composition of Hoshiyama thus arriving at the claimed molded product since Betz teaches that a further improvement in his eyeglasses is achieved by tinting and Hoshiyama teaches an improved process of tinting eyeglass lenses made from polycarbonate and or acrylic. It would have been obvious to replace the butyl cellosolve in the composition of Hoshiyama with diethylene glycol monobutyl ether because Hoshiyama teaches that they are equivalent for the purpose of dyeing eyeglass lenses at col 4 lines 15-22. Alternatively it would have been obvious to treat the CR-39 lenses dyed by the process of Hoshiyama with the coatings suggested by Betz et al. in order to provide improved eyeglasses for hunters and skeet shooters.

Claim Objections

Claims 34-36 are objected to because of the following informalities: on the last line of page 34 of the amendment, in section d of claim 34, "prepare" should be "prepared" and on the next line of the claim "optionally" needs to be deleted to agree

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with the deletion of optionally from section (d) first line of claim 34.. Appropriate correction is required.

In claims 10 and 34, what is the meaning of "poly(oxy-1,2-ethanediyl), alpha-phenyl-omega-hydroxy, **styrenated**" How is said compound **styrenated**?

Allowable Subject Matter

Claims 34 –36 are allowable over the art of record. No art was found in which a composition consisting of the four claimed components in the claimed proportions is taught or suggested.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 571-272-1314. The examiner can normally be reached on 7:00 AM -4:30 PM M-W and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/15/04


Margaret Einsmann
Primary Examiner
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